



# **Troubleshooting Guide for Application Launcher and Business Element Manager**

**Avaya Business Communications Manager  
Release 6.0**

Document Status: **Standard**

Document Number: **NN40171-700**

Document Version: **01.01**

Date: **December 2010**

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## Preface

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This document describes the Application Launcher and Business Element Manager, and provides some troubleshooting tips for the Avaya Business Communications Manager (Avaya BCM) 5.0 and later releases.

## Symbols used in this guide

This guide uses symbols to draw your attention to important information. The following symbols appear in this guide:



**Caution:** Caution Symbol

Alerts you to conditions where you can damage the equipment.

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**Danger:** Electrical Shock Hazard Symbol

Alerts you to conditions where you can get an electrical shock.

---



**Warning:** Warning Symbol

Alerts you to conditions where you can cause the system to fail or work improperly.

---



**Note:** Note Symbol

A Note alerts you to important information.

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## Text conventions

This guide uses the following text conventions:

*italic text*

Indicates book titles.

Example: *Business Communications Manager Installation and Maintenance Guide*.

**bold text**

Indicates items on the screen or keys on the keyboard.

Example: Press the **Enter** key.

## Acronyms

This guide uses the following acronyms:

BCM	Business Communications Manager
JRE	Java Runtime Environment
PC	Personal Computer
SSL	Secure Socket Layer
URL	Uniform Resource Locator
XML	Extensible Markup Language

## Related publications

For more information about using Avaya BCM, refer to the *Avaya Business Communications Manager 6.0 Documentation Roadmap* (NN40170-119).

## Customer service

Visit the Avaya Web site to access the complete range of services and support that Avaya provides. Go to <http://www.avaya.com> or go to one of the pages listed in the following sections.

### Navigation

- “Getting technical documentation” on page 7
- “Getting product training” on page 7
- “Getting help from a distributor or reseller” on page 7
- “Getting technical support from the Avaya Web site” on page 7

### Getting technical documentation

To download and print selected technical publications and release notes directly from the Internet, go to <http://www.avaya.com/support>.

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# Chapter 1

## Overview

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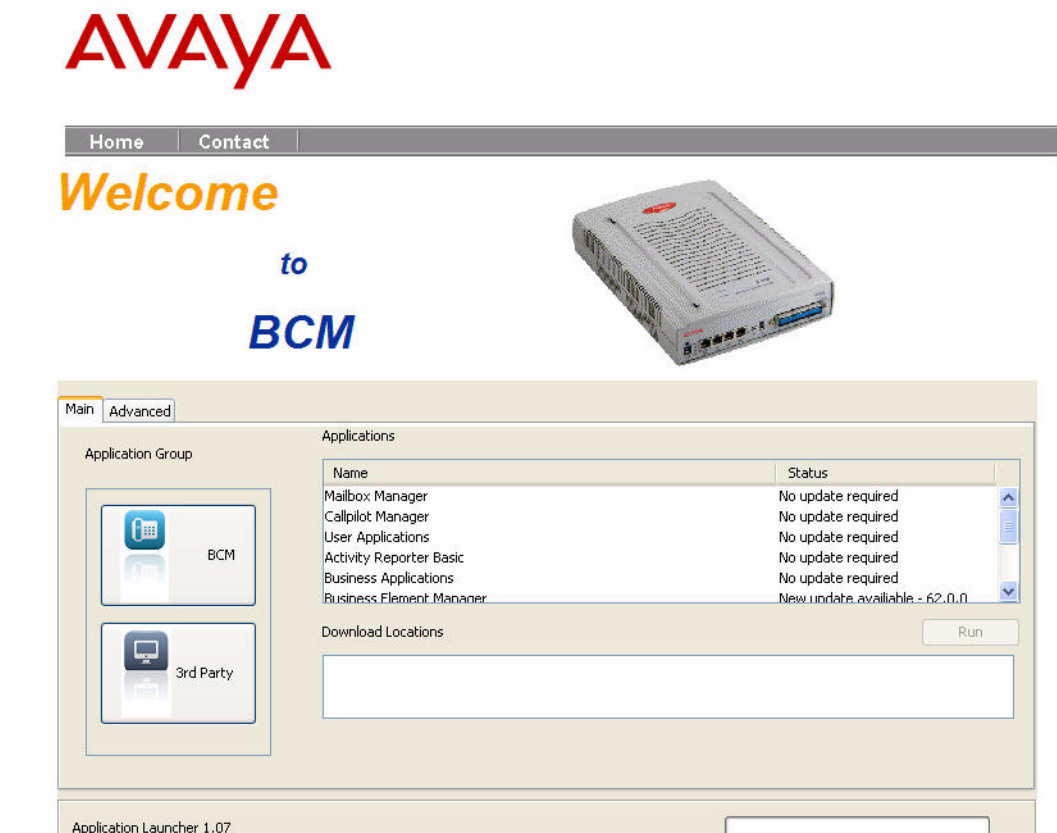
After you launch a web browser at an Avaya Business Communications Manager (Avaya BCM) IP address, you can see the Application Launcher. The Application Launcher is a Web application responsible for a number of operations including:

- presenting a list of applications that is customized based on your Avaya BCM Login credentials
- allowing you to run or install any application that is presented to you

Application Launcher replaces the static web pages from earlier BCM releases with options tailored to match the privileges of the user logging into the BCM.

Figure 1 shows the Application Launcher.

**Figure 1** Application Launcher



When the Application Launcher attempts to run an application, the Application Launcher checks the type of application. The Application Launcher supports two types of applications:

- Web based application – a link to a web site

- A PC based application – requires installation, version checking, and signature validation

If you run a PC based application, the Application Launcher validates the version of the application installed on the PC (if installed before). If the application installed on the PC is an old version, the Application Launcher automatically downloads and updates the application. If the version is correct, the Application Launcher validates (to ensure it has not been corrupted or tampered) and runs the Application.

Avaya business partners can also customize the list of applications available on a BCM through the upload Custom Configuration functions of the application launcher. Additionally, a business partner is able to update the banner residing on the top of the BCM main web interface.

Benefits of the Application Launcher:

- installs the latest version of the applications that you selected seamlessly
- ensures that if an application is corrupted or modified, a new version is installed automatically
- enables a reduction in patch sizes, for example the Business Element Manager has been reduced from 160MB to 17MB
- customizable by business partners
- provides a dynamic list of applications and URLs based on BCM user access levels
- provides branding capabilities by allowing the replacement of the default banner with a corporate logo



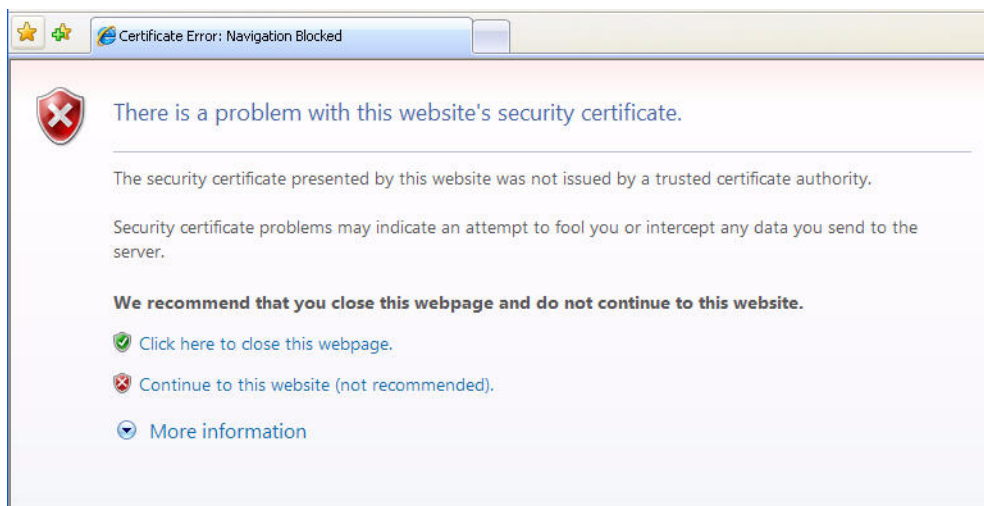
**Note:** The Application Launcher requires the Java Runtime Environment (JRE). Java is no longer packaged with the Business Element Manager. Avaya recommends that you download and install JRE 1.6 update 14 or later from <http://java.sun.com>.

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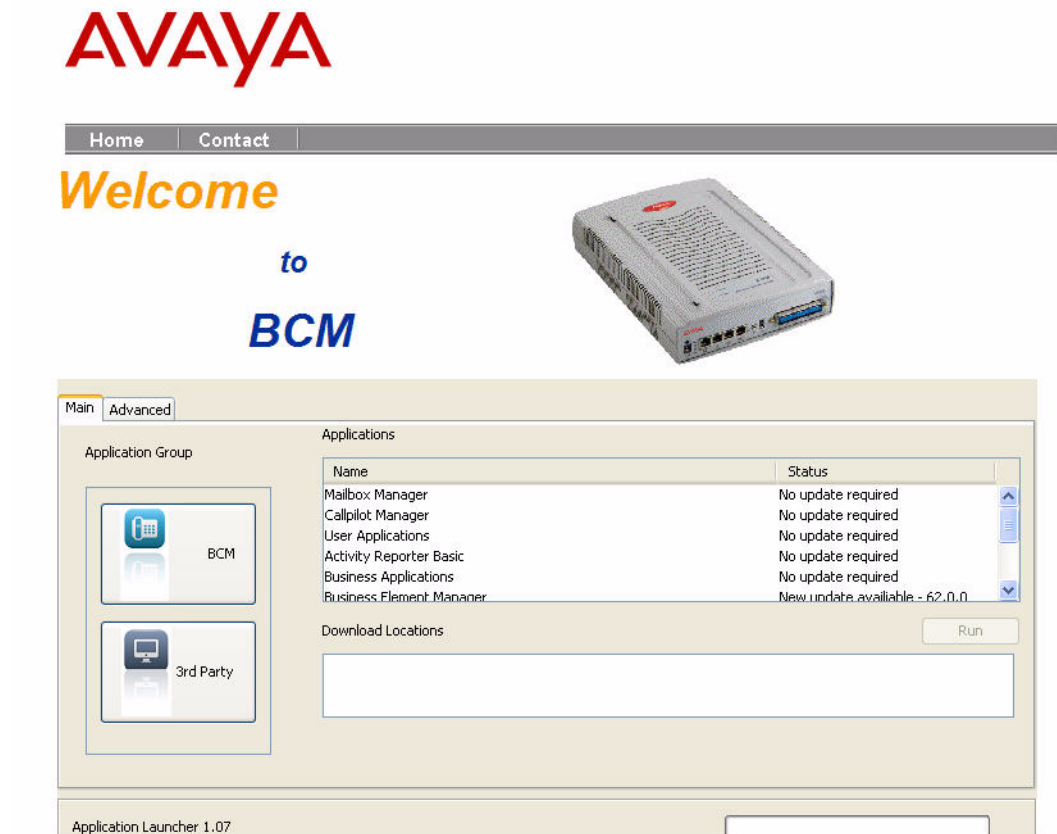
## BCM Web page – first look

Upon connecting to a BCM, you must login and accept the BCM Certificates. Application Launcher requires Java 1.6 update 14 or later. You are prompted to update Java on the PC if Java is not at the correct release.

If you are not prompted to install or update Java and the Application Launcher is not visible, you must manually install Java. You can download Java from the Java distribution site at <http://java.sun.com>.

**Figure 2** Example of a certificate error

After both the SSL certificate and the Java certificate is accepted, you are presented with the main BCM screen (Figure 3).

**Figure 3** BCM main screen

## Application Launcher tabs

There are two tabs in the Application Launcher. A Main tab which contains most of the functionality of the Application Launcher, and the Advanced tab which contains less used features.

### Main tab

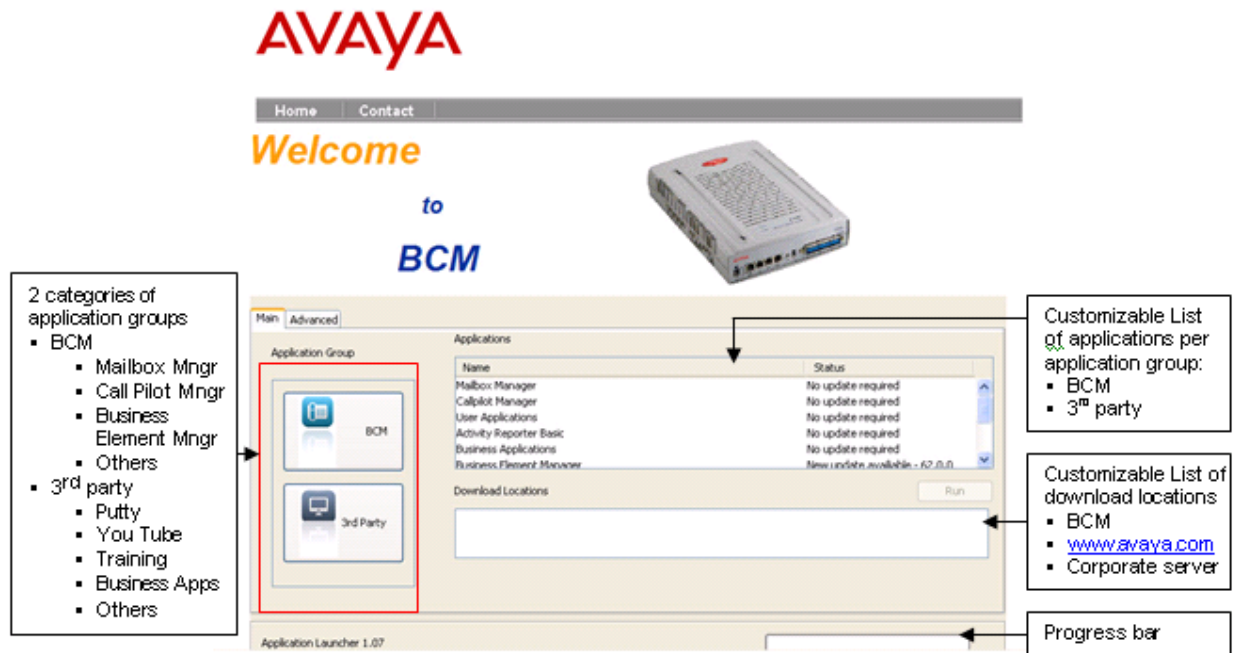
From the Main tab, you can install applications and launch web pages. If you want to run an application or access content in the Applications list, perform the following steps:

- Select an application from the Applications section.
- Select the preferred download location, or use the default.
- Double click the Application, or use the run button.
- If this is the first time an application is run, the application also creates a desktop shortcut to provide rapid access to the application.

For any application that it installs, the Application Launcher installs links on the Desktop and in Start Menu > Program Files > Avaya > Business Element Manager. Newer versions of the Application Launcher also install and uninstall applications in the Start Menu > Program Files > Avaya > Business Element Manager.

When you run an application using the Application Launcher, the launcher validates the local copy of the application, installs a new version if required, and runs the application.

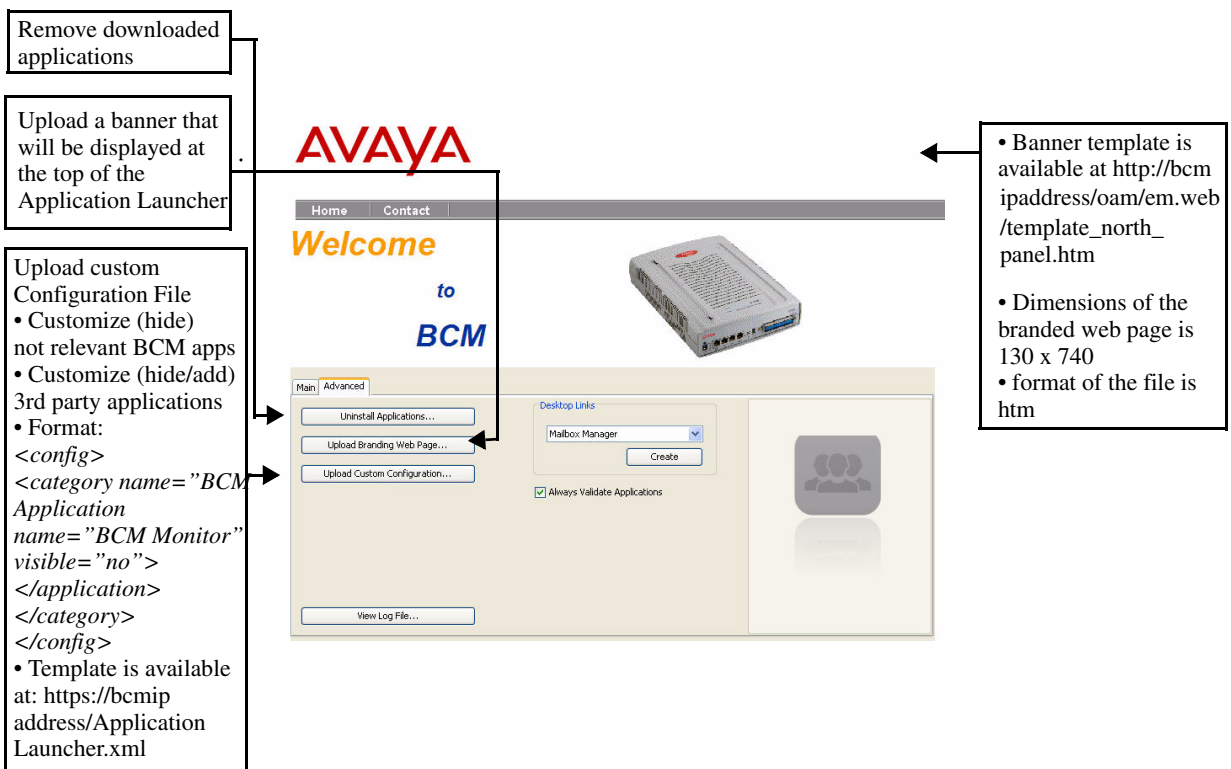
**Figure 4** Applications Launcher Main tab



## Advanced tab

From the advanced tab, you can:

- upload a custom configuration file that permits you to tailor the applications which are presented in both the BCM and 3rd Party categories.
- upload a banner that appears at the top of the Application Launcher.
- remove all downloaded applications from your PC.
- manually create desktop shortcuts.

**Figure 5** Applications Launcher - Advanced tab

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# Chapter 2

## Business Element Manager

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Starting with Avaya Business Communications (Avaya BCM) Release 5.0, the Business Element Manager is installed by the Application Launcher. To install the Business Element Manager, connect to the Avaya BCM Application Launcher or the Avaya download site

### Install through the Application Launcher

After the Business Element Manager is installed, the Application Launcher attempts to copy your existing node list from a previously installed Business Element Manager. If the previous version of Business Element Manager was installed by the Application Launcher, the installation process automatically copies over your node list and cartridges. If the previous version of Business Element Manager (pre BCM Release 5.0 - 61.0.1) was not installed by the Application Launcher, the installation process prompts you to select the folder where the previous instance of Business Element Manager node list and cartridges are located so that the node list and cartridges can be copied.



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**Note:** If your previous version was installed using a pre-BCM Release 5.0 Business Element Manager (earlier than 61.0.1), then it must be manually uninstalled after the Application Launcher installs the latest Business Element Manager using the Control Panel Add/Remove.

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**Note:** Use the links created by the Application Launcher for the newly installed Business Element Manager and not the previous instance of Business Element Manager. You can verify the version of the Business Element Manager by checking the Help->About version. The version must be 61.0.1 or later.

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### Installing the Business Element Manager using the BCM software download site

You can install the Business Element Manager online from the following location:  
<http://www.avaya.com/support>.

## Install through the standalone Business Element Manager

The standalone installer for the Business Element Manager does not include Java and therefore you must manually install JRE. The Business Element Manager requires Java 1.6.14 or later to be installed.

After Java 1.6.14 or later is installed, you can use the standalone Business Element Manager installer. The standalone Business Element Manager is available from the BCM software download site, located at <http://www.avaya.com/support>. After reaching <http://www.avaya.com/support>, navigate to BCM50 or BCM450, and select the software downloads link.

### Remove older versions

Remember to remove older versions of the Business Element Manager after you install the new Business Element Manager using the Application Launcher. The Application Launcher does not install the Business Element Manager in the same folder as previous instances of the Business Element Manager; therefore any Business Element Manager shortcuts may also require updates.



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# Chapter 3

## Configuration of the Application Launcher

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The Application Launcher supports customization of the web banner. The administrator can also customize the list of Avaya Business Communications Manager (Avaya BCM) and third party applications.

This topic describes the two different options and provides examples.

### Branding Web page

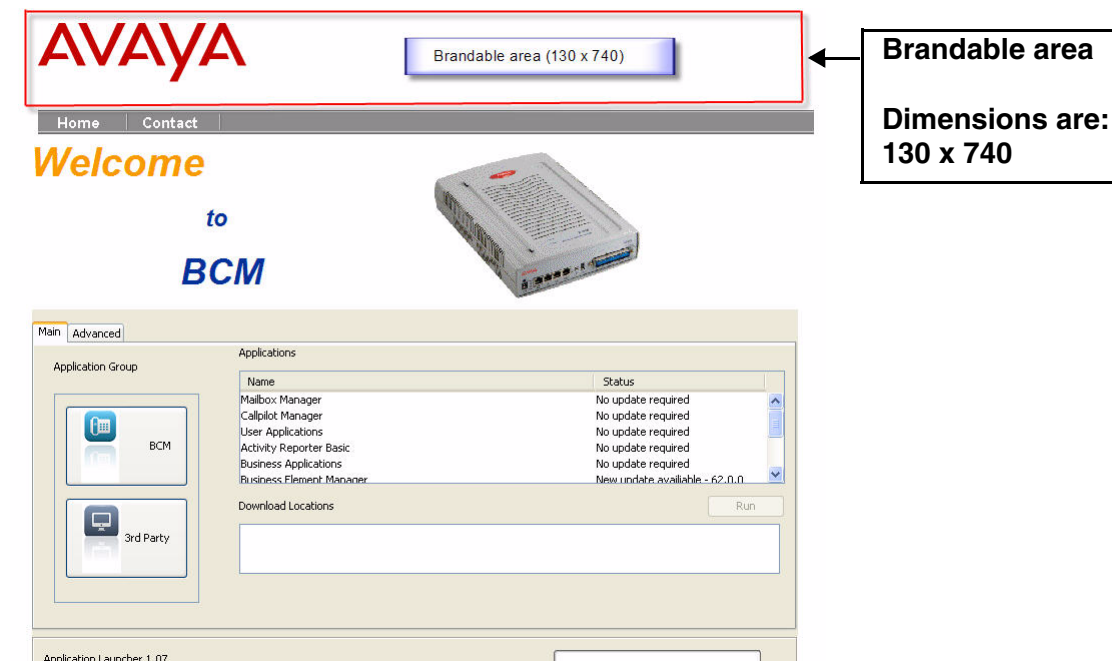
With the Application Launcher, you can upload a web page onto the Avaya BCM to replace the branding along with home and contact information. The dimensions of the branded web page are 130 x 740 approximately.

A template is available for modification. You can download the template from the following URL:  
[http://<bcmipaddress>/oam/em.web/template\\_north\\_panel.htm](http://<bcmipaddress>/oam/em.web/template_north_panel.htm).

The format of the file is html.

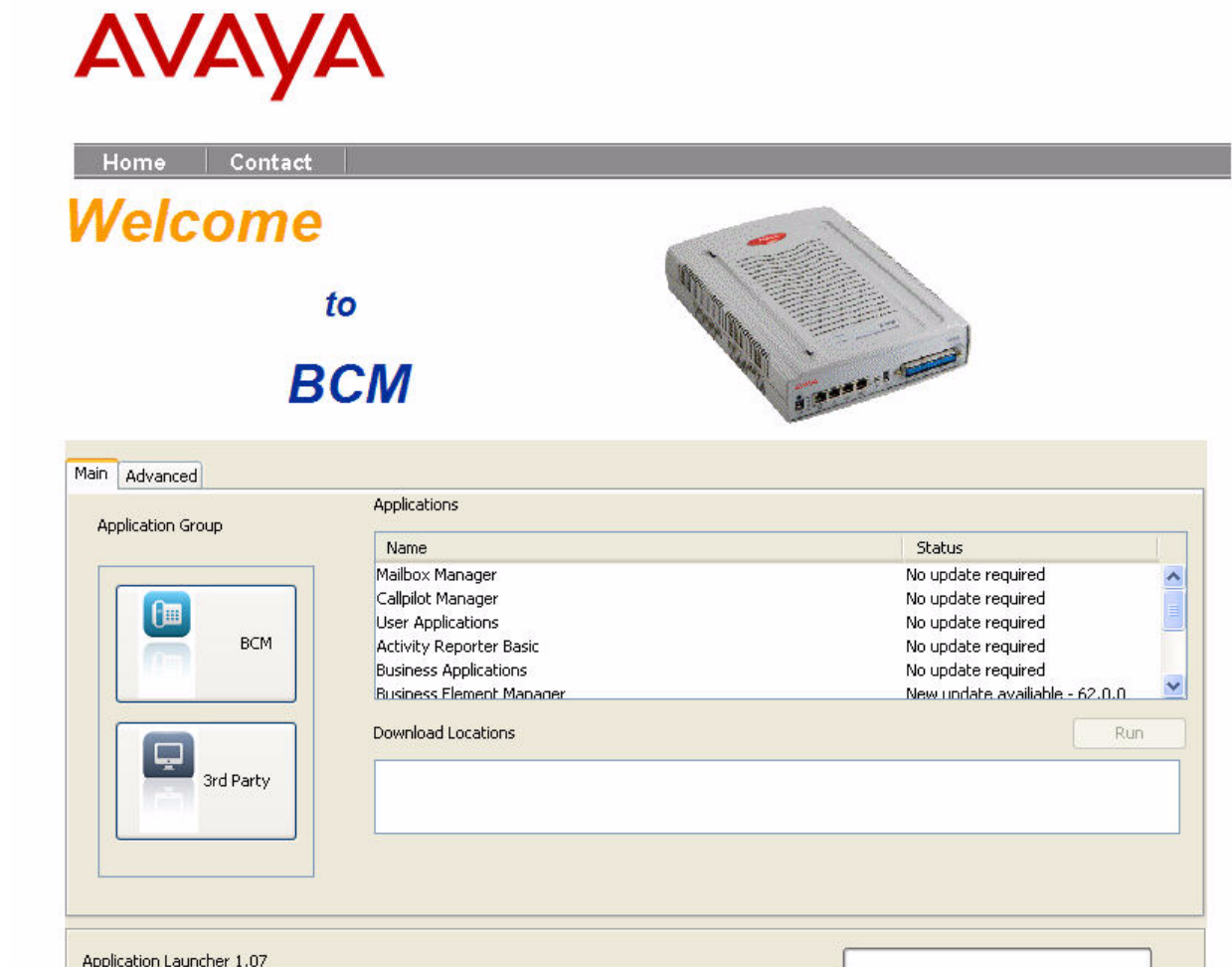
The following image shows the brandable area (Figure 6).

**Figure 6** Application Launcher - Branding



The following figure is an example of Application Launcher branding.

**Figure 7** Example of Application Launcher branding



## Addition of custom applications

Business partners can provide new applications directly to customers by adding them to the Application Launcher. Any new application added to the Application Launcher appears under the 3rd party button.

You can customize the list of applications available through the Application Launcher by using one of the following two methods:

- modifying the default list of applications
- adding new applications or web links

You can modify existing applications or add a new application by uploading a new XML configuration file to the BCM.

The following describes the specific format of the XML file.

The most important XML tags in the BCM configuration file are described in the following list:

- All BCM configuration updates are enclosed in `<config>` and `</config>` tags
- Changes to applications in the BCM category must be enclosed in `<category name="BCM Applications">` `</category>` tags
- New 3rd Party applications and web links or changes to existing 3rd Party applications must be enclosed in `<category name="Additional Applications">` `</category>` tags

Additional details are provided later in this section and are demonstrated through the examples in this document.

## XML tag definitions

The following is a list of XML tag definitions.

- `config`—tag specifies the beginning and end of a configuration entry.
- `category`—tag defines the start and end of an application category. There are two existing categories defined by the name setting:
  - `BCM Applications`—contains all BCM specific applications.
  - `Additional Applications`—contains all non-BCM specific applications.

The category tag can contain applications.

- `application`—the inside of this tag defines an application or web link that is added to the BCM. Application tags can have the following settings:
  - `name`—required for all applications.
  - `visible`—optional field set to true if it is always visible, and false if it is hidden.
  - `version`—a non-space field that contains the version of the application.
  - `folder`—the sub folder in which the application is installed.

There are two types of applications: web URLs and executable applications.

An executable application can contain the following tags:

- `exec`—the executable to run. The only two supported executable formats are: `.bat` files and `.exe` files.
- `download`—a URL that contains the application to be downloaded.

A web URL application can contain the following tag:

- `url`—the URL of the application.

## Examples

The following are examples of custom applications that you can add to the Application Launcher.

### Example 1

```
01. <config>
02. <category name="BCM Applications">
03. <application name="BCM Monitor" visible="no" />
04. <application name="Data Migration Manager" visible="no" />
05. <application name="Business Element Manager">
06. <download url="http://staging.server.com/BCM_cache/EM-61.0.0.zip" name="Highspeed
    Server"/>
07. </application>
08. </category>
09. <category name="Additional Applications">
10. <application name="Avaya Support" visible="no" />
11. <application name="Acme System Support">
12. <url url="http://www.acme.com/support/BCM" name="Acme System Support"/>
13. </application>
14. </category>
15. </config>
```

The following list describes lines 01 to 15 in the above example.

- The config sections indicate the start and end of the file and must be present in all XML configurations. See line 1 and 15.
- The category tag surrounds an Application Group. There are types of groups as mentioned. Category tags appear on lines 2, 8, 9, 14.
- The application tags define visibility, or contain additional download URLs. Application tags appear on lines 3, 4, 5, 7, 10, 11, 13.
- Lines 5 and 7 open and close a Business Element Manager application update, and line 6 indicates that a new download URL should be added.
- Lines 11 through to lines 13 indicate the addition of an application to the Additional Applications group with a single web link named Acme Support Systems.
- The download tag is indicates additional download locations for applications. See line 6.
- The url tag indicates a web link. See line 12.
- The application section can have more then one url or download.

**Example 2**

Example 2—Provide additional download locations for standard BCM applications.

```
<config>
<category name="BCM Applications">
<application name="BCM Element Manager">
<download url=" http://serverx3/5.0/ElementManager.zip name="EM Distribution Site"/>
</application>
</category>
</config>
```

**Example 3**

Example 3—Hide applications from the default list provided in the BCM.

```
<config>
<category name="BCM Applications">
<application name="BCM Monitor" visible="no">
</application>
</category>
</config>
```

**Example 4**

Example 4—Add a new URL to a BCM.

```
<config>
<category name="Additional Applications">
<application name="3rd Party Sales">
<url url="http://the3rdparty.com/sale" name="3rd Party.com"/>
</application>
</category>
</config>
```

**Example 5**

Example 5—Add a new application to the Application Launcher.

```
<config>
<category name=" Additional Applications">
<application name="New Application">
<exec path="bin" name="run.bat"/>
<download url=" http://serverx3/NewAppForCustomers.zip" name="Application Distribution
Site"/>
</application>
</category>
</config>
```

**Example 6**

Example 6—Add an application that is available to specific users.

```
<config>
<category name="Additional Applications">
<application name="Help" folder="3rdPartyHelp" version="1">
<privilege username="nnadmin"/>
<privilege id="Admin"/>
<exec name="help.exe" />
<download url="http://3rdParty.co.uk/bcm/help/help.exe" name="3rd Party Main Office"/>
</application>
</category>
</config>
```

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# Chapter 4

## Best practices

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You are only required to have the latest copy of Business Element Manager installed. There is no requirement to have multiple versions; having multiple versions can cause confusion.

Ensure you have backup copies of your Business Element Manager cartridges and Node list.

Make sure to keep your PC patch current.

Backup your Avaya Business Communications Manager (Avaya BCM) regularly.

Periodically check for new Avaya BCM applications by running the applications through the Application Launcher.

Change your BCM passwords from the default.





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# Chapter 5

## Frequently asked questions

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This chapter answers common questions about the Business Element Manager and the Application Launcher.

### Business Element Manager

This section answers common questions about the Business Element Manager.

**Will the new version of Business Element Manager work with older versions of the Avaya Business Communications Manager (Avaya BCM)? For instance, will Business Element Manager 61.0.1 work with BCM50 1.0?**

Yes, the Business Element Manager is backwards compatible with older versions of Avaya BCM.

**Can I copy my new Business Element Manager node list and cartridges to an older version of Business Element Manager?**

No, this is not supported as the formats have changed.

**I started up Business Element Manager but I don't see my node list.**

You may have selected the incorrect shortcut to the Business Element Manager. Ensure that the version of the Business Element Manager is 61.0.1 or later using the Help -> About in the Business Element Manager.

The new Business Element Manager is located in the user's profile for example, in Windows XP this is by default:

C:\Documents and Settings\pcuser\.bcm\BEM\

If the version of the Business Element Manager is correct, copy the node list and cartridges from a backup copy of the node list and cartridges to the newly installed Business Element Manager location.

**How do I uninstall an earlier version of the Business Element Manager?**



**Warning:** You must ensure that you only uninstall the previous version of the Business Element Manager after you install the new version of the Business Element Manager.

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You can safely use the Control Panel to uninstall the Business Element Manager that was not installed using the Application Launcher. Ensure that you keep a copy of your Node List (summary.xml) and Cartridge files.

**How do I remove applications installed by the Application Launcher?**

You can uninstall applications installed by the Application Launcher by using the Advanced tab of the Application Launcher.

As of Application Launcher 1.04: As of a new update, any application installed by the Application Launcher can also be un-installed using the Start Menu > Program Files > Avaya > Business Element Manager > Uninstall application.

**Where is the Business Element Manager on my PC?**

The Business Element Manager is installed by the Application Launcher in the current users profile in the .bcm/BCM folder.

For example:

C:\Documents and Settings\pcuser\.bcm\BEM\.

**Where is Business Element Manager node list stored?**

The Business Element Manager node list resides in the following path:

[root folder of Element Manager install]\bin\access\summary.xml

For example:

C:\Documents and Settings\pcuser\.bcm\BEM\bin\access\summary.xml

Or, for an older Business Element Manager install:

C:\Program Files\Avaya\Business Element  
Manager\BusinessElementManager\bin\access\summary.xml

## Application Launcher

This section answers common questions about the Application Launcher.

**Where are the installed applications?**

The Application Launcher downloads and caches applications to a user's profile in the folder .bcm. For example, on a Windows XP machine this is:

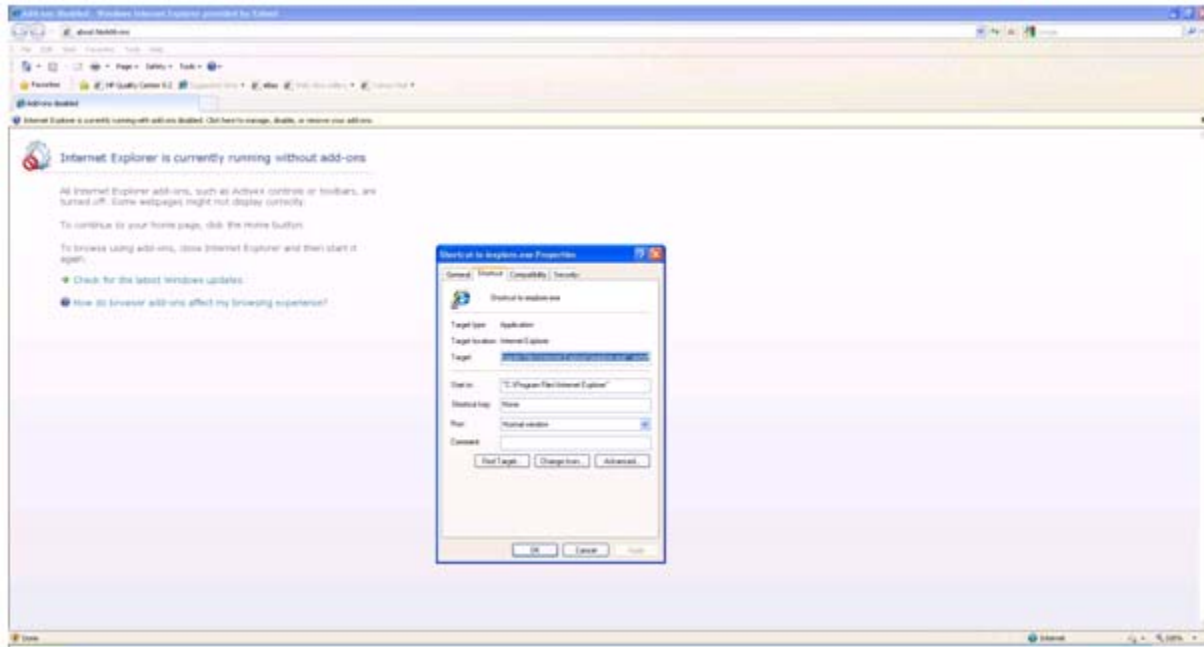
Documents And Settings\[username]\.bcm.

**Browser running with add-ons disabled.**

If you see a message in your Internet Explorer that says, "Internet Explorer is currently running with add-ons disabled. Click here to manage, disable or remove your add-ons.", it likely means that the shortcut you used to run internet explorer has the option "-extoff".

To fix the issue, create a new shortcut to Internet Explorer without the -extoff option.

The following image shows the option after it is enabled.

**Figure 8** Add ons disabled screen**Browser that does not have Java installed.**

If you do not have JRE installed for your browser and you were not asked to install one, the following image appears.

The following screen appears if you do not have JRE installed for your browser.

**Figure 9** No JRE installed

To resolve the issue, uninstall the JRE, if there is one currently installed, using the instructions provided by Sun at [www.java.com](http://www.java.com), on the downloads page.

After the Java JRE is uninstalled, you must reinstall it.

**I can't install the Business Element Manager with the Application Launcher. The Application Launcher says download 100% and then my Internet Explorer freezes and the Java console icon disappears from my start menu when my mouse hovers over it.**

There is an interaction problem discovered in some older PCs between the Web Browser and JRE. Sun is working on a fix. You must disable the next generation Java Plugin while the installation of an application is occurring.

For instructions on a temporary work around, go to [www.java.com](http://www.java.com), and select the downloads page.